

he was a great figure in American botany, because of the stimulus he gave to the study of our science. Other botanists there had been and were, but only one of these, Benjamin Smith Barton, was particularly noted as a teacher; the circle of his influence was not large, and he died at a comparatively early age. Cultured people flocked to Eaton's lectures and were inspired by them, and he was the author of the first popular manual for the identification of our native plants. He was by no means as profound a botanical student as some of his contemporaries, but he was a good botanist, and devoted particular attention to the widest possible diffusion of such knowledge as he possessed. This constitutes his claim to remembrance by posterity.

The volume before us gives evidence of extensive and painstaking research, and the results are presented clearly and pleasingly. Perhaps the most confusing part of the book is in the few pages devoted to Eaton's "family life." The treatment here is full and accurate, but it is necessary to read and reread it before one can feel at all sure just how many wives and children Eaton really had; the number of each was unusually large.

A 55-page bibliography of the sources, both manuscript and printed, consulted in the preparation of the work, precedes the index. This is remarkable, not only for the large number of entries (more than 900), but for the exasperating incompleteness of detail in the case of many of them. The 666 letters are listed in detail, with names of writers and addressees, dates, and present location.

JOHN HENDLEY BARNHART

NEW YORK BOTANICAL GARDEN

A Bacteriology Laboratory Guide

Laboratory Guide in Elementary Bacteriology. By M. S. Marshall. The Blakiston Company, Philadelphia. 1941. Pp. 244. \$1.75.

This is an unusual manual for beginning students in the study of bacteria. The subject matter is presented in such a way that analysis, thought and interpretation take precedence over the routine performance of the experiment. The material is presented from the standpoint that few students will pursue the subject further.

The manual is divided into six sections which include: Introductory Technique, Morphology, Physiology, Applied Bacteriology,

Serology, and Infection. Immunology is not considered in the text. A total of ninety-two experiments are covered and thirty-three of these are devoted to the physiology of bacteria where the major emphasis belongs. The directions are clear, concise, and free from extraneous material, all of which tends to develop sound technique.

The section on serology is especially well executed for beginners. The four experiments listed deal with the preparation of an antigen, the production of antibodies, electrolytes and agglutination. *Proteus vulgaris* is the organism used in the experiments and the rabbit is used to stimulate agglutinin production.

The experiments used in the section of applied bacteriology covers various phases of water, milk and its pasteurization, food spoilage, acetic acid, soil counts, and bacteria in root nodules. Each section of the book lists a series of questions pertaining to that particular topic, which require thought and analysis. The appendix tabulates miscellaneous information keeping the text free of irrelevant information.

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FIELD TRIPS OF THE CLUB

TRIPS OF MAY 24-25 (1941) TO THE WATCHUNG MOUNTAINS

Sixty-six members and guests were present on these two trips, the first to Washington Valley, near Watchung, and the second to Seeley's Notch, near Scotch Plains, N. J.

In previous notes in *TORREYA* on the flora of this area¹ 603 species, varieties, and forms have been recorded by their scientific names, in addition to many others listed less formally by only their common names. To conserve space and avoid needless repetition in the following reports species previously listed by their scientific names will be referred to only by their common names, while species or varieties not previously listed formally will be referred to once by their scientific names and thereafter only by their common

¹ *Torreyia* 31: 29-36 (1931), 36: 57-61 and 88-93 (1936), 38: 10-11, 103-105 and 157-158 (1938), 39: 143-145 (1939), 40: 24-25 and 177-179 (1940), and 41: 23-25 (1941).